

BOOK REVIEWS

CHEMISTRY OF FUNGICIDAL ACTION by R. J. Lukens, edited by A. Kleinzeller, Philadelphia; G. F. Springer, Evanston; H. G. Wittmann, Berlin, with pp. 136, 8 figures. London: Chapman and Hall Ltd.; Berlin, Heidelberg and New York; Springer-Verlag, 1971. £5.00.

The material is well presented and well edited in a book with hard cover (linen) of 25×17 cm format.

This is a monograph with data "based on literature of plant pathology, pharmacology and industrial preservatives." The first chapter includes a brief historical introduction together with notes on the importance and general actions of fungicides. Chapters two to four briefly summarise the measurement of fungitoxicity, methods of application, dispersal, deposition, retention, persistence, formulation and cell penetration. The main topic, chemistry of fungicidal action, is introduced in chapter five, in which sites of action are discussed.

Fungicides which interfere with the metabolism of the cell are of two types. The most important are those reacting with cellular constituents. These are discussed in chapter six, while the second type, those affecting enzyme systems, are dealt with in chapter seven. Chapter eight deals with structure-activity relationships of certain fungicides, while the final chapter discusses the action of the fungus on the fungicide.

An appendix gives the structure and uses of a number of the better-known fungicides. There is also an extensive subject index, and a comprehensive list of references. These references, together with the manner of presentation of the subject matter, makes this an extremely suitable reference work for senior and postgraduate students. Agricultural extension workers will also find it useful. It is, however, unsuitable for laymen or for the research chemist.

The subject matter is of a universality which makes it equally suitable for South African and overseas conditions.

The author has ably covered an extremely wide field but there are no half-tone illustrations and few equations, graphs or tables. The impression gained is that the author's space was restricted by the publisher.

P. S. VAN WYK.

INDEX TO SOUTH AFRICAN PERIODICALS.

We wish to draw to your attention the annual *Index to South African Periodicals*, in which this journal is indexed. This is an alphabetical list of articles appearing in South African periodicals and is arranged under the name of the author and the subject of the article. It should be of great value to all research workers concerned with current South African material.

The *Index* may be consulted in the Reference Department of the Johannesburg Public Library and in most of the larger libraries in the country. The current issues are also obtainable from the Johannesburg Public Library at R10.00 per annual volume.